



## State of Nevada – Department Of Personnel

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### CLASS SPECIFICATION

<u>TITLE</u>	<u>GRADE</u>	<u>EEO-4</u>	<u>CODE</u>
COMPUTER OPERATIONS MANAGER	41	A	7.904
COMPUTER OPERATIONS SUPERVISOR III	39	B	7.912
COMPUTER OPERATIONS SUPERVISOR II	37	B	7.920
COMPUTER OPERATIONS SUPERVISOR I	34	B	7.934

### SERIES CONCEPTS

Incumbents in this series direct the data production, operations and help desk activities in order to ensure that all user files and reports are created, processed and available in a timely manner and networks are maintained and monitored. Direction is provided by establishing goals and objectives, arranging for emergency coverage, scheduling shift rotations and coordinating planned shutdowns of the system, system maintenance, application software upgrades.

Develop, maintain, and enforce the operational standards in accordance with departmental policies to ensure operating specifications are met. Standards are developed by consulting with department/agency management and vendor specialists, reviewing technical manuals, and translating this information into written policies.

Assist department/agency managers in developing physical safety and security procedures for the data operation section. Safety regulations and procedures are developed by analyzing safety procedures utilized by other computer operation centers, reviewing literature on safety and security procedures and following State/Federal guidelines and consulting with subject matter experts.

Incumbents supervise subordinate data processing staff by assigning, reviewing, and evaluating work assignments, scheduling, hiring, recommending and implementing disciplinary action, and providing or arranging for training of subordinates.

Design the physical layout and installation requirements in response to the purchase of new equipment; analyze hardware technical manuals, floor space layouts, environmental requirements, and electrical requirements; and determine training required prior to installation.

Monitor and maintain existing equipment and environmental controls as well as emergency power sources, alarm systems, etc., to maintain the integrity of the machine room environment.

Assist management in the evaluation of hardware configurations for the purpose of making recommendations on hardware selection by reviewing system-generated reports, system logs, utilization reports, and technical hardware manuals.

Provide ongoing systems performance evaluation to detect and recommend corrective measures pertaining to hardware or software problems.

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### **SERIES CONCEPT (cont.)**

Evaluate and maintain inventory control, e.g., computer supplies, tape library, departmental equipment, etc., to make sure that the system runs and schedules are met.

Provide information and assist management in budget development and proposal by reviewing previous years' budget allocations and projecting future budget requirements.

Develop and maintain physical as well as logical security in order to prevent unauthorized access to the computer installation or its data.

Assist in the development of data recovery and implementation of disaster recovery policies and procedures.

**NOTE:** Levels within this class series are distinguished by the size of the computer operations unit for which the position is responsible, the type of supervision received, the size and level of subordinate staff, and the scope and effect of decisions.

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### **CLASS CONCEPTS**

#### **COMPUTER OPERATIONS MANAGER**

Under general administrative direction, manage and oversee the total operation of a large mainframe computer operations center with multiple shifts. Incumbents in this class supervise staff engaged in the operation of a computer system and related peripheral equipment, and production control, ensuring user needs and production schedules are met on all shifts.

Incumbents are responsible for meeting departmental budget goals and objectives; provide input to agency policy direction regarding standards and overall computer operations activities; exercise supervision over subordinate computer operations supervisors; assign personnel to projects and direct their activities; develop standards and procedures; prepare activity and progress reports for systems support functions.

#### **COMPUTER OPERATIONS SUPERVISOR III**

Under general direction, supervises the activities of all assigned computer operations personnel in a large computer operations center. The operations center (full function data center) has a complex environment and does not depend on any other systems to complete tasks. Incumbents in this class supervise staff engaged in the operation of a computer system and related peripheral equipment, and production control, ensuring user needs and production schedules are met. May be responsible for the supervision of the help desk staff.

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### CLASS CONCEPTS (cont.)

#### COMPUTER OPERATIONS SUPERVISOR II

Positions allocated to this class are characterized by either:

1. Under general supervision of a higher level Computer Operations Supervisor, supervise a shift in a large mainframe multi-programming computer center: OR
2. Under administrative direction, supervises multiple shifts of data processing operations utilizing a mid-range or minicomputer processing unit with host computers.

#### COMPUTER OPERATIONS SUPERVISOR I

Under general supervision of a higher level Computer Operations Supervisor, supervises the activities of Computer Systems Technicians, ensuring user needs and production schedules are met.

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### MINIMUM QUALIFICATIONS

#### COMPUTER OPERATIONS MANAGER

##### EDUCATION AND EXPERIENCE:

I

Bachelor's degree from an accredited college or university with major work in data processing, computer science, business administration or a closely related field, and six years of experience in mainframe computer operations, three years of which must have been in a supervisory capacity; OR

II

Two years of experience as a Computer Operations III in Nevada State service; OR

III

An equivalent combination of education and experience by which the applicant demonstrates possession of the entry level knowledge, skills and abilities.

##### EQUIVALENCY STATEMENT:

Education above the high school level may be substituted for experience on the basis of 30 semester credits equals six months of the required experience up to a maximum of one year of the required experience.

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### MINIMUM QUALIFICATIONS (cont.)

#### EDUCATION AND EXPERIENCE: (cont.)

#### SPECIAL NOTE:

In order to meet the needs of various agencies, individual positions in this class may require specialized backgrounds or skills in order for the incumbent to perform all of the essential tasks. Any specialized background required will be identified prior to recruitment, within the parameters of the class specification.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or are needed to perform the work assigned.)

Detailed knowledge of Nevada Revised Statutes including policies, procedures and standards pertaining to releasing information to authorized persons. Detailed knowledge of the Department's data processing policies and procedures. Working knowledge of the data processing workflow of various state agencies or divisions served pertaining to the data processing functions. Working knowledge of Nevada State personnel rules and regulations. Working knowledge of Nevada State budgetary policies and procedures. Working knowledge of Nevada State purchasing policies and procedures for hardware/software procurement.

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (Applicants will be screened for possession of these through written, oral, performance or other evaluation procedures.)

Detailed knowledge of diagnostic procedures as needed in verifying computer operations systems. Detailed knowledge of the principles of computer operations, capabilities and limitations, and related equipment in order to efficiently and effectively produce the final work product.

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#### COMPUTER OPERATIONS SUPERVISOR III:

#### EDUCATION AND EXPERIENCE:

I

Bachelor's degree from an accredited college or university with major work in data processing, computer science, business administration or closely related field and four years of experience in data processing/computer operations, two years of which must have been in a supervisory capacity;  
OR

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### **MINIMUM QUALIFICATIONS (cont.)**

#### **EDUCATION AND EXPERIENCE: (cont.)**

##### **II**

Two years as a Computer Operations Supervisor II in Nevada State service; OR

##### **III**

An equivalent combination of education and experience by which the applicant demonstrates possession of the entry level knowledge, skills and abilities.

#### **EQUIVALENCY STATEMENT:**

Education above the high school level may be substituted for experience on the basis of 30 semester credits equals six months of the required experience, up to a maximum of one year of the required experience.

#### **SPECIAL NOTE:**

In order to meet the needs of various agencies, individual positions in this class may require specialized backgrounds or skills in order for the incumbent to perform all of the essential tasks. Any specialized background required will be identified prior to recruitment, within the parameters of the class specification.

#### **FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or are needed to perform the work assigned.)**

Detailed knowledge of the department's operational and procedural standards pertaining to the data processing function. Detailed knowledge of the workflow within the agency. Detailed knowledge of diagnostic procedures as needed in verifying systems. Detailed knowledge of the principles of operation, capabilities and limitations of a computer system and related equipment in order to efficiently and effectively produce the final work product. Working Knowledge of Nevada State personnel rules, regulation, policies and procedures. Working knowledge of supervisory theories, principles and practices. Working knowledge of State purchasing policy and procedures for hardware/software procurement.

Ability to anticipate changes and new directions within the data processing environment.

#### **ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (Applicants will be screened for possession of these through written, oral, performance or other evaluation procedures.)**

Detailed knowledge of the basic elements of programming in order to generate all required reports and special projects as required of the data processing section. General knowledge of diagnostic

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### **MINIMUM QUALIFICATIONS (cont.)**

#### **ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (cont.)**

procedures as needed in verifying systems. Working knowledge of the principles of operation, capabilities and limitations of a computer system and related environmental equipment in order to efficiently and effectively produce the final work product. Detailed knowledge of the computer operating system including all functions, schedules, workflows, and processes. General knowledge of computer programming documentation techniques as needed in setting up and verifying systems programs. Working knowledge of data communication networks.

Ability to analyze and develop current and proposed computer operation procedures for efficient and effective operations. Ability to establish and maintain cooperative working relationships with co-workers and users to facilitate work flow. Ability to order and maintain supplies. Ability to understand and apply technical manuals, environmental requirements and physical planning. Ability to organize disk and tape libraries. Ability to evaluate equipment utilization and output in order to provide management with recommendations concerning hardware/software purchases. Ability to correctly identify, diagnose and correct problems related to computer operations. Ability to make decisions and use independent judgment. Ability to communicate effectively orally and in writing. Ability to maintain effective working relationships with others. Ability to plan, organize and direct a twenty-four hour, seven-day-a-week shift operation of a computer system.

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#### **COMPUTER OPERATIONS SUPERVISOR II:**

##### **EDUCATION AND EXPERIENCE:**

I

Bachelor's degree from an accredited college or university with major work in data processing, computer science, business administration or a closely related field and three years of experience in data processing/computer operations, one year of which must have been in a supervisory capacity; OR

II

Two years as a Computer Operations Supervisor I in Nevada State service; OR

III

An equivalent combination of education and experience by which the applicant demonstrates possession of the entry level knowledge, skills and abilities.

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### **MINIMUM QUALIFICATIONS (cont.)**

**EDUCATION AND EXPERIENCE:** (cont.)

**EQUIVALENCY STATEMENT:**

Education above the high school level may be substituted for experience on the basis of 30 semester credits equals six months of the required experience, up to a maximum of one year of the required experience.

**SPECIAL NOTE:**

In order to meet needs of various agencies, individual positions in this class may require specialized backgrounds or skills in order for the incumbent to perform all of the essential tasks. Any specialized background required will be identified prior to recruitment, within the parameters of the class specification.

**FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES:** (These may be acquired on the job and/or are needed to perform the work assigned.)

Detailed knowledge of the department's operational and procedural standards pertaining to the data processing function. Detailed knowledge of the work flow and the different divisions and sections within the department in order to facilitate the work flow process. General knowledge of diagnostic procedures as needed in verifying systems. Working knowledge of supervisory theories, principles and practices. General knowledge of Nevada State personnel rules and regulations.

**ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES:** (Applicants will be screened for possession of these through written, oral, performance or other evaluation procedures.)

Working knowledge of the basic elements of programming as needed to perform the data processing function. General knowledge of the principles of operation, capabilities and limitations of a multi-programming computer system and related equipment. Working knowledge of the principles of operation, capabilities and limitations of a computer system and related environmental equipment in order to efficiently and effectively produce the final work product. Working knowledge of data communication network. Detailed knowledge of the computer operating system in all functions, schedules, work flows, organizational goals and processes.

Ability to understand and apply technical manuals. Ability to evaluate equipment utilization and output in order to provide management with recommendations concerning hardware/software purchases. Ability to organize and direct disk and tape libraries. Ability to plan, organize and direct a shift or multi-shift operation of a computer system in order to facilitate the work flow. Ability to order and maintain supplies. Ability to correctly identify, diagnose and rectify problems related

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### MINIMUM QUALIFICATIONS (cont.)

#### ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (cont.)

to computer operations. Ability to make decisions and use independent judgement. Ability to communicate effectively orally and in writing. Ability to maintain effective working relationships with others.

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#### COMPUTER OPERATIONS SUPERVISOR I:

##### EDUCATION AND EXPERIENCE:

##### I

Graduation from high school or the equivalent education and four years of experience in data processing/computer operations which includes operating and maintaining a host computer system with peripheral equipment such as disc drive, magnetic tapes, line printers etc.; OR

##### II

An equivalent combination of education and experience where the applicant has demonstrated possession of the entry level knowledge, skills and abilities.

#### EQUIVALENCY STATEMENT

Education above the high school level may be substituted for experience on the basis of 30 semester credits equals six months of the required experience, up to a maximum of one year of the required experience.

##### SPECIAL NOTE:

In order to meet the needs of various agencies, individual positions in this class may require specialized backgrounds or skills in order for the incumbent to perform all of the essential tasks. Any specialized background required will be identified prior to recruitment, within the parameters of the class specification.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or are needed to perform the work assigned.)

General knowledge of the department's operational and procedural standards pertaining to the data processing function. General knowledge of the work flow and the different divisions and sections within the department in order to facilitate the work flow product. General knowledge of the basic elements of programming as needed to perform data processing functions. General knowledge of



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### **MINIMUM QUALIFICATIONS (cont.)**

#### **FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (cont.)**

the principles of operation, capabilities and limitations of a multi-programming computer system and related peripheral equipment in order to process the work flow product. General knowledge of supervisory theories and practices. General knowledge of Nevada State personnel rules and regulations.

Ability to identify and diagnose problems related to computer operations. Ability to establish and maintain cooperative working relationships with co-workers and users in order to facilitate the work flow. Ability to understand and apply technical manuals.

**ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES:** (Applicants will be screened for possession of these through written, oral, performance or other evaluation procedures.)

General knowledge of the basic elements of programming as needed to perform data processing functions. General knowledge of the principles of operation, capabilities and limitations of a multi-programming computer system and related peripheral equipment in order to process the work flow product.

Ability to analyze and develop current and proposed computer operation procedures for efficient and effective operations. Ability to order and maintain supplies. Ability to understand and apply technical manuals and environmental requirements. Ability to organize and direct disk and tape libraries. Ability to correctly identify, diagnose and rectify problems related to computer operations. Ability to make decisions and use independent judgement. Ability to communicate effectively orally and in writing. Ability to maintain effective working relationships with others.

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

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ESTABLISHED:	7/1/87 7/18/86PC	5/1/68	5/1/68	4/1/69
REVISED:		4/1/70	4/1/70	4/1/70
REVISED:		7/1/87-12P 7/18/86PC	7/1/87-12P 7/18/86PC	7/1/87-12P 7/18/86PC
REVISED:	7/1/95P 9/16/94PC	7/1/95P 9/16/94PC	7/1/95P 9/16/94PC	7/1/95P 9/16/94PC
REVISED:		8/11/95UC		
REVISED:	7/1/97LG	7/1/97LG	7/1/97LG	7/1/97LG